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## ABSTRACT

A time-interleaved analog-to-digital converter stores in a correction information memory, correction information required to correct an error between signals output by a plurality of N analog-to-digital converters in advance. At this time, in order to enable acquisition of data required for a correction processing within a short period of time, a signal generator causes the plurality of N analog-to-digital converter to input a calibration signal including a plurality of signal components, each of which is positioned at a desired frequency in a bandwidth in which N/2 times of a sampling frequency Fs is defined as an upper limit, the signal components appearing in a bandwidth in which half times of the sampling clock frequency Fs is defined as an upper limit by sampling the analog-to-digital converters. A correction information calculating unit carries out a spectrum analysis relevant to analog-to-digital converted signals output by the plurality of N analog-to-digital converters in response to the calibration signal, thereby obtaining an amplitude and a phase of a plurality of signal components, newly obtaining the correction information, based on the amplitude and phase, and updating contents of the correction information memory in accordance with newly obtained correction information.